

**REMARKS**

At the time of the Office Action dated July 2, 2004, claims 1-8 were pending, all of which stand rejected.

In this Amendment, claims 1 and 3-7 have been amended and claim 2 has been canceled. Care has been exercised to avoid the introduction of new matter. Specifically, claims 1, 6 and 7 have been amended to include the limitation recited in claim 2 and the additional limitation. Adequate descriptive support for the additional limitation added can be found on, for example, page 10, line 17 to page 11, line 5 of the specification. In claims 1 and 3-7, the term “pseudo bypass register” has been replaced with “transfer register” so as to use the wording which can be found in the specification. In addition, claims 4 and 5 have been amended to revise wording. Claim 8 has also been amended because of cancellation of claim 2.

**Drawings.**

The Examiner has objected to the drawings because the “pseudo bypass register” specified in the claims is not shown in the drawings (paragraph 2 of the Office Action). Applicants respectfully disagree with the Examiner’s position because a register corresponding to the “pseudo bypass register” is shown in the drawings.

Applicants believe that the Examiner simply focused on the wording of “pseudo bypass register” itself, concluding that the drawings do not show the “pseudo bypass register.” However, Applicants respectfully submit that the Examiner overlooked a “transfer registers 16 and 26” as shown in Fig. 1, which corresponds to the “pseudo bypass register”

recited in the claims (see Applicants' arguments for the rejection under 35 U.S.C. §112, first paragraph, discussed below).

Accordingly, Applicants respectfully request the Examiner to carefully review the specification and drawings, and solicit withdrawal of the objections to the drawings.

**Specification.**

The Examiner has pointed out that "the specification lacks an enabling description for claims 1-8, in reference to limitation 'pseudo bypass register'" in paragraph 3 of the Office Action. In response, Applicants respectfully disagree with the Examiner's position because the "pseudo bypass register" is disclosed in the specification so as to enable a person skilled in the art to make and use it without undue experimentation (see Applicants' arguments for the rejection under 35 U.S.C. §112, first paragraph, discussed below).

The title has also been objected to since it is not descriptive. In response, Applicants have amended the title, as attached.

Accordingly, Applicants respectfully solicit withdrawal of the objections to the specification.

**Claim Objections.**

The Examiner advised that a comma or colon should be inserted after the transitional phrase "wherein" in claim 1. In response, Applicants have amended claim 1 in a manner suggested by the Examiner. Accordingly, withdrawal of the claim objections is respectfully solicited.

**Claims 1-8 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.**

In paragraph 6 of the Office Action, the Examiner asserted that “The specification fails to properly define the function of a ‘pseudo bypass register’ recited in the independent claim[s] 1, 6 and 7.” The Examiner specifically asserted that “The specification, in the summary of the invention, describes ‘a pseudo bypass register having a bypassing function of the test data input’ which is not adequate to enable a person skilled in the art to make use of the claimed invention.” This rejection is traversed as legally erroneous.

Lack of enablement under the first paragraph of 35 U.S.C. §112 is a question of law. *U.S. Steel Corp. v. Phillips Petroleum Co.*, 865 F.2d 1247, 9 USPQ2d 1461 (Fed. Cir. 1989); *U.S. v. Teletronics Inc.*, 857 F.2d 778, 8 USPQ2d 1217 (Fed. Cir. 1988). In rejecting a claim under the first paragraph of 35 U.S.C. §112 for lack of adequate enabling support, it is incumbent upon the Examiner to establish a basis in fact and/or cogent technical reasoning to support the legal conclusion that one having ordinary skill in the art would not be able to practice the claimed invention, armed with the supporting specification, without undue experimentation. *In re Brana*, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995); *In re Marzocchi*, 439 F.2d 220, 169 USPA 367 (CCPA 1971). It is emphasized that a patent disclosure is directed to one having ordinary skill in the art. *In re Howarth*, 654 F.2d 103, 210 USPQ 689 (CCPA 1981). Applicants stress that a patent specification is presumed enabling in the absence of a reason to doubt the objective truth of the statements contained therein. *In re Brana, supra*; *In re Marzocchi, supra*.

In applying the above legal tenets to this case, Applicants submit that the Examiner has not established a *prima facie* basis to deny patentability to the claimed invention under the first paragraph of 35 U.S.C. §112 for lack of adequate enabling support. Merely offering a conclusion of lack of enablement does not overcome the judicially establish presumption that the present disclose is, in fact, enabling. *In re Brana, supra*; *In re Marzocchi, supra*.

Indeed, Applicants found that the Examiner simply focused on the wording of “pseudo bypass register” itself, concluding that the description does not describe the “pseudo bypass register,” but the summary of the invention does. As mentioned above, Applicants respectfully submit that the Examiner overlooked a “transfer register” in the specification which corresponds to the “pseudo bypass register” recited in the claims. For example, the specification discloses as follow:

In Fig. 1, 16 signifies a transfer register (TR) that constitutes the JTAG circuit of the logic 1, which assumes the same configuration as the BR 13, and has the function to bypass the test data input signal TDI to the output. Page 10, line 23 to page 11, line 2.

Reference numeral 17 signifies a first selector that is connected to the TR 16 and the DR 12, which is selectively controlled and selected by the DR 12. Page 11, lines 3-5.

In the logic 2, the DR 22 makes the first selector 27 select the TR 26, and the IR 24 makes the second selector 28 select the output from the first selector 27. Therefore, the test result signal from the logic 1 is outputted to the test data output TDO by way of the TR 26, the first selector 27, and the second selector 28 of the logic 2. Page 12, lines 5-11.

It is submitted that by referring to the specification, a person skilled in the art can find that the “pseudo bypass register” corresponds to the “transfer register,” and that he/she is able to practice the claimed invention without undue experimentation. Applicants further submit that 35 U.S.C. §112, first paragraph, does not mandate that in describing a certain element, the same terminology has to be used both in claims and description. The Examiner is

required to do more than say a disclosure is not enabling; the Examiner must overcome a judicial presumption that it is enabling with hard facts. *In re Brana, supra*; *In re Marzocchi, supra.* That burden has not been discharged.

Applicants, therefore, respectfully submit that the imposed rejection of claims 1-8 under the first paragraph of 35 U.S.C. §112 for failing to comply with the enablement requirement is not legally viable and, hence, solicit withdrawal thereof.

In this Amendment, the term “pseudo bypass register” is replaced with --transfer register-- only for clarification. Without this amendment, the claimed “pseudo bypass register” has an adequate enabling support.

**Claims 4 and 5 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

In paragraph 7 of the Office Action, the Examiner asserted as follows by citing *In re Mason*, 114 USPQ 127, 44 CCPA 937 (CCPA 1957): “Claims 4 and 5 recite: ‘whereby . . .’ Such recitation is non-functional language,<sup>1</sup> and as a result, is not given patentable weight. It has been held that functional ‘whereby’ statement does not define any structure and accordingly cannot serve to distinguish.”

In response, Applicants have amended claims 4 and 5, as attached, to obviate the functional language issue. Therefore, Applicants respectfully solicit withdrawal of the rejection of claims 4 and 5, and favorable consideration thereof.

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<sup>1</sup> Applicants understand that the Examiner intended to mention “functional language,” not “non-functional language.”

**Claims 1-8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kawano et al.**

In the statement of the rejection, the Examiner admitted that Kawano et al. does not explicitly disclose a pseudo bypass register having a bypassing function of the test data input, wherein the pseudo bypass register is controlled by the data register selecting the first selector. However, the Examiner asserted that the reference discloses a “bypass register 102,” which is used when data are bypassed from a JTAG circuit to another JTAG circuit, by enabling the test data input TDI to be bypassed to the test data output TDO. Then, the Examiner concluded that it would have been obvious to use the bypass register as taught by Kawano et al., since the bypass register performs the identical function of a pseudo bypass register, thus being cost effective by avoiding adding another register.

It is noted that the “pseudo bypass register” in the claims has been replaced with -- transfer register-- in this Amendment. Therefore, Applicants refer to the one as the transfer register instead of the pseudo bypass register.

It is well settled that to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Based on this legal tenet, Applicants submit that Kawano et al. does not teach or suggest a testing device including all the limitations recited in claims 1, 6 and 7, as amended.

Specifically, Applicants submit that Kawano et al. does not teach or suggest, among other things, the limitation “said data register is configured for selecting said transfer register by controlling said first selector when said more than one different logics are simultaneously set to be in a test mode,” and “a second selector that is connected to said boundary scan

register, said first selector, said bypass register, and said instruction register, which is selectively controlled by said instruction register,” as recited in claims 1, 6 and 7. In other words, the reference does not teach that the transfer register is selected by the data register when the more than one different logics are simultaneously set to be in a test mode, and the bypass register is selected by the instruction register.

Even if the Examiner’s assertion that Kawano et al. teaches having two bypass register assumed to be reasonable, the reference does not teach or suggest the above limitations recited in claims 1, 6 and 7. Thus, Kawano does not teach or suggest a testing device including all the limitations recited in claims 1, 6 and 7 within the meaning of 35 U.S.C. §103. *In re Royka*, 490 F.2d 981.

It is also noted that if an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Accordingly, as claim 1 is patentable for the reasons set forth above, it is submitted that dependent claims 3-5 which respectively depend from claim 1 are also patentable.

It is further submitted that claim 8 is also patentable because Kawano et al. does not teach a test method of a semiconductor integrated circuit which employs a testing device including all the limitations recited in claims 1, 6 and 7 for the reasons set forth above.

Therefore, Applicants respectfully solicit withdrawal of the rejections of claims 1-8 and favorable consideration thereof.

**Conclusion.**

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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